

Title (en)

TREATING DISORDERS BY APPLICATION OF INSULIN-LIKE GROWTH FACTORS AND ANALOGS

Publication

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Application

EP 90909874 A 19900605

Priority

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Abstract (en)

[origin: WO9014838A1] A method of enhancing the survival of neuronal cells in a mammal, the cells being at risk of dying, the method comprising administering to the mammal an effective amount of at least one of the following substances: IGF-I; a functional derivative of IGF-I; IGF-II; or a functional derivative of IGF-II, provided that if IGF-I or IGF-II is administered, NGF or a functional derivative of NGF is also administered.

IPC 1-7

A61K 37/24; A61K 37/26

IPC 8 full level

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Citation (search report)

- [X] EP 0308386 A1 19890322 - KABIVITRUM AB [SE]
- [X] PROC. NATL. ACAD. SCI., vol. 81, 1984, pages 2562-2566; E. RECIO-PINTO et al.: "Insulin and insulin-like growth factor II permit nerve growth factor binding and the neurite formation response in cultured human neuroblastoma cells"
- [YD] NEUROBIOLOGY OF AGING, vol. 3, no. 2, 1982, pages 117-120; V.R. SARA et al.: "Somatomedins in aging and dementia disorders of the Alzheimer Type"
- [Y] PROC. NATL. ACAD. SCI., vol. 83, 1986, pages 9231-9235; L.R. WILLIAMS et al.: "Continuous infusion of nerve growth factor prevents basal forebrain neuronal death after fimbria fornix transection"
- [YD] NEUROSCIENCE LETTERS, vol. 88, no. 2, 1988, pages 221-226; L. NILSSON et al.: "Insulin-like growth factor 1 stimulates the release of acetylcholine from rat cortical slices"
- [YD] BRAIN RESEARCH, vol. 406, nos. 1/2, 1987, pages 32-42; Y. AIZENMAN et al.: "Brain neurons develop in a serum and glial free environment: effects of transferrin, insulin, insulin-like growth factor-I and thyroid hormone on neuronal survival, growth and differentiation"
- [Y] DRUG DEVELOPMENT RESEARCH, vol. 11, no. 2, 1987, pages 75-86; J.E. TAYLOR et al.: "Small peptides and nerve growth: therapeutic implications"
- [Y] PROC. NATL. ACAD. SCI., vol. 85, June 1988, pages 4066-4070; E. DiCICCO-BLOOM et al.: "Insulin growth factors regulate the mitotic cycle in cultured rat sympathetic neuroblasts"
- [YD] JOURNAL OF NEUROSCIENCE, vol. 8, no. 8, August 1988, pages 2967-2985; J. HARTIKKA et al.: "Development of septal cholinergic neurons in culture: plating density and glial cells modulate effects of NGF on survival, fiber growth, and expression of transmitter-specific enzymes"
- [YPD] JOURNAL OF NEUROSCIENCE, vol. 10, no. 2, February 1990, pages 558-570; B. KNUSEL et al.: "Selective and nonselective stimulation of central cholinergic and dopaminergic development in vitro by nerve growth factor, basic fibroblast growth factor, epidermal growth factor, insulin and the insulin-like growth factors I and II"
- [AD] ENDOCRINE REVIEWS, vol. 7, no. 3, 1986, pages 314-330; W.M. PARDRIDGE: "Receptor-mediated peptide transport through the blood-brain barrier"
- [AD] BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol. 146, no. 1, 15th July 1987, pages 307-313; W.M. PARDRIDGE et al.: "Chimeric peptides as a vehicle for peptide pharmaceutical delivery through the blood-brain barrier"
- See references of WO 9014838A1

Cited by

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